

**Second
Five-Year Review Report**

**Big River Sand Company Site
Wichita, Sedgwick County, Kansas**

EPA ID: KSD980686174

February 2004

Prepared for:
U.S. Environmental Protection Agency
Region VII
901 North 5th Street
Kansas City, Kansas 66101

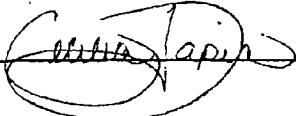
Prepared by:
Black & Veatch Special Projects Corp.
6601 College Blvd.
Overland Park, Kansas 66211

Site:	BIG RIVER SAND
ID #:	KSD980686174
Break:	8.0
Other:	2-1-04

075N

Approved by:

Date:



2/26/04

40157304



SUPERFUND RECORDS

Contents

Abbreviations and Acronyms	i
Executive Summary	ES-1
1.0 Introduction	1-1
2.0 Site Chronology	2-1
3.0 Background	3-1
3.1 Physical Characteristics	3-1
3.2 Land and Resource Use	3-1
3.3 History of Contamination	3-1
3.4 Initial Responses	3-2
3.5 Basis for Taking Action	3-2
4.0 Remedial Actions	4-1
4.1 Interim Remedial Measures Remedy Selection	4-1
4.2 Final Remedy Selection	4-1
4.3 Post Remedial Action Activities	4-1
5.0 Progress Since Last Five-Year Review	5-1
6.0 Five-Year Review Process	6-1
6.1 Administrative Components	6-1
6.2 Community Notification and Involvement	6-1
6.3 Document Review	6-1
6.4 Data Review	6-1
6.5 Site Inspection	6-2
6.6 Interviews	6-2
7.0 Technical Assessment	7-1
7.1 Question A: Is the remedy functioning as intended by the decision documents?	7-1
7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of remedy selection still valid?	7-1
7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?	7-1
7.4 Technical Assessment Summary	7-1
8.0 Issues	8-1

Contents (Continued)

9.0 Recommendations and Follow-Up Actions	9-1
10.0 Protectiveness Statement	10-1
11.0 Next Review	11-1
Attachment 1	Site Figures and Well Logs
Attachment 2	Site Documents Reviewed
Attachment 3	Applicable or Relevant and Appropriate Requirements
Attachment 4	2003 Groundwater Sampling Data
Attachment 5	Site Inspection Trip Memorandum with Checklist and Interview Forms

Tables

Table 2-1	Chronology of Site Events	2-1
Table 6-1	Groundwater Sampling Results	6-3

Abbreviations and Acronyms

ARAR	Applicable or relevant and appropriate requirements
ATSDR	Agency for Toxic Substances and Disease Registry
bgs	below ground surface
BVSPC	Black & Veatch Special Projects Corp.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
FS	feasibility study
KDHE	Kansas Department of Health and Environment
MCL	maximum contaminant level
NCP	National Contingency Plan
NPL	National Priorities List
RA	remedial action
RAO	remedial action objective
RI	remedial investigation
ROD	Record of Decision
RPM	Remedial Project Manager
SARA	Superfund Amendments and Reauthorization Act
TCE	trichloroethylene
ug/L	micrograms per liter
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound

Executive Summary

The Big River Sand site is located in the south half of Section 2, Township 27 South, Range 1 West, Sedgwick County, Kansas. The site covers approximately 123 acres, half of which have been extensively mined for sand and gravel. The site is currently owned by Mr. Victor Eisenring. Sand and gravel operations are no longer active at the site. The Eisenring office and residence are located on the southern portion of the property.

A removal action was conducted by the site owner, Mr. Victor Eisenring, from 1982 to 1984. The removal action included disposal of hazardous paint sludges and solvent from the site. The Record of Decision (ROD) for the site, signed June 28, 1988, selected the No Further Action alternative as the final remedy for the Big River Sand Company site. The site was deleted from the National Priorities List (NPL) on October 14, 1992.

The first five-year review of the remedies at the site was completed in February 1999. The first five-year reviews concluded that the site remained protective of human health and the environment. The first five-year review recommended that a groundwater sample be either collected from monitoring well E101S or in the immediate vicinity of E101S during the next five-year review.

The assessment of this, the second, five-year review found that the remedies continue to be protective. The immediate threats have been addressed and the remedies remain protective of human health and the environment. Review of the analytical data from the groundwater sampling conducted as part of this review indicate that remedial action objectives (RAOs) identified in the ROD have been achieved. Specifically, the groundwater contamination has reduced to below the maximum contaminant levels (MCLs).

It is recommended that the five-year reviews be discontinued for the Big River Sand Company site.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name (from WasteLAN): Big River Sand Company Site

EPA ID (from WasteLAN): KSD980686174

Region: 7

State: KS

City/County: Wichita/Sedgwick County

SITE STATUS

NPL status: ☐ Final ☒ Deleted ☐ Other (specify) _____

Remediation status (choose all that apply): ☐ Under Construction ☐ Operating ☒ Complete

Multiple OUs?* ☐ YES ☒ NO

Construction completion date: 06/28/1988

Has site been put into reuse? ☒ YES ☐ NO

REVIEW STATUS

Lead agency: ☒ EPA ☐ State ☐ Tribe ☐ Other Federal Agency _____

Author name: Genise M. Luecke

Author title: Site Manager

Author affiliation: Black & Veatch

Review period:** 10/01/2003 to 02/28/2004

Date(s) of site inspection: 12/19/2003

Type of review:

- ☒ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only
☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead
☐ Regional Discretion

Review number: ☐ 1 (first) ☒ 2 (second) ☐ 3 (third) ☐ Other (specify) _____

Triggering action:

- ☐ Actual RA Onsite Construction at OU # _____ ☐ Actual RA Start at OU# _____
☐ Construction Completion ☒ Previous Five-Year Review Report
☐ Other (specify) _____

Triggering action date (from WasteLAN): 02/01/1999

Due date (five years after triggering action date): 02/01/2004

* ["OU" refers to operable unit.]

** [Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.]

Five-Year Review Summary Form, cont'd.

Issues:

No issues were identified.

Recommendations and Follow-up Actions:

It is recommended that this be the last five-year review conducted at the site. The selenium concentration in the groundwater sample collected in December 2003 from the direct-push boring completed 4 feet from monitoring well E101S was below the MCL. The remedial action objectives of the Record of Decision have been met.

Protectiveness Statement(s):

Because the remedial actions are protective, the site is protective of human health and the environment. The groundwater concentrations have reduced to below the MCL for selenium.

Other Comments:

None.

1.0 Introduction

The purpose of the five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of the reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and identify recommendations to address them.

The Agency is preparing this Five-Year Review report pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 121 and the National Contingency Plan (NCP). CERCLA § 121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after initiation of remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgement of the President that action is appropriate at such a site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to Congress a list of facilities for which such review is required, the results of such reviews, and any actions taken as a result of such reviews.

The Agency interpreted this requirement further in the NCP; 40 CFR §300.430(f)(4)(ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

The U.S. Environmental Protection Agency (USEPA) Region VII has conducted a five-year review of the remedial actions implemented at the Big River Sand Company site in Wichita, Sedgwick County, Kansas. This review was conducted by a contractor, Black & Veatch Special Projects Corp. (BVSPC), for the entire site from October 2003 through January 2004. This report documents the results of the review.

This is the second five-year review for the site. The first five-year review was completed by USEPA Region VII in February 1999. The triggering action for this second

statutory review is the completion of the previous five-year review. The five-year review is required because hazardous substances, pollutants, or contaminants remained at the site above levels that allowed for unlimited use and unrestricted exposure.

2.0 Site Chronology

Table 2-1 presents a summary of the major site events and relevant dates in the site chronology.

Table 2-1
Chronology of Site Events

Event	Date
Site discovery by the Kansas Department of Natural Resources (KDHE).	08/1982
Preliminary assessment completed.	10/01/1982
KDHE issued order to Mr. Eisenring to conduct a removal and site cleanup.	09/20/1982
Removal action and site cleanup completed by Mr. Eisenring.	1984
Proposed for the National Priorities List (NPL).	10/15/1984
Site inspection completed.	10/31/1985
Final listing on the NPL.	06/10/1986
Agency for Toxic Substances and Disease Registry (ATSDR) provided a Health Consultation for the Site	11/1987
Combined remedial investigation/feasibility study (RI/FS) completed.	06/28/1988
Record of Decision (ROD) selecting final remedy signed.	06/28/1988
Deleted from the NPL.	10/14/1992
KDHE conducted groundwater sampling.	11/1995
The first Five-Year Review was completed.	02/01/1999

3.0 Background

This section presents site background information including descriptions of the site physical characteristics, land use, and past response actions.

3.1 Physical Characteristics

The Big River Sand site is located in the south half of Section 2, Township 27 South, Range 1 West, Sedgwick County, Kansas. The site covers approximately 123 acres, half of which have been extensively mined for sand and gravel. The site is currently owned by Mr. Victor Eisenring. Sand and gravel operations are no longer active at the site. The Eisenring office and residence are located on the southern portion of the property. A vicinity map showing the general location of the site is included in Attachment 1.

3.2 Land and Resource Use

The land use for the site is commercial industrial. Part of the property site is used as a sand quarry. The remaining portions of site are used as a junk yard.

3.3 History of Contamination

During the 1970s, approximately 2,000 drums of paint-related wastes were disposed of on the Eisenring property, adjacent to a 5-acre sand quarry lake. In 1978, Mr. Eisenring sold about 80 acres of his property, which included the quarry lake and drum storage area, to the Big River Sand Company. As part of the sales agreement, Mr. Eisenring began to transfer the drums to his adjacent property in 1982. Nearly 200 barrels were transferred before the Kansas Department of Health and Environment (KDHE) halted the action because Mr. Eisenring did not have a permit to store or dispose of the waste.

KDHE conducted an initial site inspection in August 1982 and identified damaged, corroded, and leaking drums. KDHE sampled materials from several drums including solvents and paint sludges. Metals including arsenic, cadmium, chromium, lead and selenium, and volatile organic compounds (VOCs) including toluene, ethylbenzene, and trichloroethylene (TCE) were detected in the waste materials. Waste solvents from the barrels were determined to be hazardous waste due to the characteristic of ignitability. Paint sludges failed the EP Toxicity test for chromium.

3.4 Initial Responses

In September 1982, KDHE issued an order to Mr. Eisenring to conduct a removal and site cleanup. From 1982 to 1984, the State provided oversight of the removal and site cleanup activities performed by Mr. Eisenring. Approximately 40 cubic yards of hazardous paint sludges were landfilled offsite and 10,000 gallons of solvents were recycled.

Between 1982 and 1985, KDHE collected samples from the site soils, the quarry lake, residential drinking water wells, and monitoring wells. Arsenic, lead, and selenium were detected in drinking water wells at concentrations greater than the Maximum Contaminant Levels (MCLs) established by the Safe Drinking Water Act. Concentrations of several metals detected in the onsite monitoring wells also exceeded MCLs. VOCs, including toluene, were detected in the onsite soils and monitoring wells.

The site was proposed for the National Priorities List (NPL) in October 1984, and in May 1986 was placed on the NPL.

A remedial investigation (RI) was conducted in 1987. The RI found metals in soil and groundwater above background levels but not outside the range of metals that may be found naturally occurring in the soil and groundwater in the area. Selenium was detected in monitoring well E101S at 62 ug/L which is above the MCL of 50 ug/L. Selenium was not detected in any other monitoring wells or drinking water wells sampled.

3.5 Basis for Taking Action

The Agency for Toxic Substances and Disease Registry (ATSDR) provided a Health Consultation for the site in November 1987. The ATSDR concluded that the site did not at that time appear to present a significant health threat based on the RI data and information. With this information, USEPA selected no further action for the final remedy for the Big River Sand Company sites in the June 28, 1988, Record of Decision (ROD).

4.0 Remedial Actions

A ROD was signed on June 28, 1988, which selected the No Further Action alternative as the final remedy for the site. The USEPA, in consultation with KDHE, determined that the site did not pose significant threat to public health and the environment and, therefore, taking additional remedial measures was not appropriate.

4.1 Interim Remedial Measures Remedy Selection

In September 1982, KDHE issued an order to Mr. Eisenring to conduct a removal and site cleanup. From 1982 to 1984, the State provided oversight of the removal and site cleanup activities performed by Mr. Eisenring. Approximately 40 cubic yards of hazardous paint sludges were landfilled offsite and 10,000 gallons of solvents were recycled.

4.2 Final Remedy Selection

A ROD for the Big River Sand Company site was signed on June 28, 1988, which selected the final remedy for the site. The ROD selected a "no further action" remedy based on a review of the effectiveness, technical feasibility, cost effectiveness, and impact to the environment. The USEPA, in consultation with KDHE, determined that the site did not pose significant threat to public health and the environment and, therefore, taking additional remedial measures was not appropriate.

4.3 Post Remedial Action Activities

The Big River Sand site was deleted from the NPL on October 14, 1992.

KDHE was tasked by the USEPA to conduct the first five-year review of the groundwater contamination associated with the Big River Sand site. As part of the five-year review, groundwater samples were to be collected from two private drinking water wells and three monitoring wells to assess the current levels of metals contamination in the groundwater. In November 1995, KDHE conducted the field work, collecting groundwater samples from the drinking water wells at the Eisenring shop and residence and monitoring wells B101S and E102S. An attempt was made to sample monitoring well E101S, but there was an obstruction in the well (possibly due to sediment buildup or a collapsed casing) and the sample could not be collected.

5.0 Progress Since Last Five-Year Review

The first five-year review (February 1999) determined that the response actions at the site continued to protect human health, welfare, and the environment at the site. The first five-year review recommended that during the second five-year review an attempt be made to collect a sample from monitoring well E101S or in the immediate vicinity of E101S to assess the concentration of selenium in the groundwater at this location.

6.0 Five-Year Review Process

6.1 Administrative Components

KDHE was notified of the initiation of the five-year review in August 2003. The Big River Sand Company site five-year review team was led by William Gresham of USEPA, the Remedial Project Manager (RPM) for the site. The five-year review site inspection was conducted by USEPA's contractor, BVSPC. The BVSPC team was led by Genise Luecke, Site Manager.

A schedule was developed for the five-year review extending through February 28, 2004, which included the following components:

- Document Review.
- Data Review.
- Site Inspection.
- Site Interviews.
- Five-Year Review Report Development and Review.

6.2 Community Notification and Involvement

A fact sheet announcing the five-year review for the Big River Sand Company site was developed in December 2003. The fact sheet was made available on the USEPA's web site and a notice was published in the Wichita Eagle on December 21, 2003.

6.3 Document Review

This five-year review consisted of a review of relevant documents including monitoring data for the site. A complete list of documents reviewed as part of the five-year review process is included in Attachment 2. Applicable cleanup standards were reviewed. The results of this review are listed in Attachment 3.

6.4 Data Review

Groundwater at the Big River Sand Company site was sampled during the RI in 1987 and again in 1995 as part of the first five-year review. In addition, as part of this five-year review site inspection, a groundwater sample was collected from a direct-push boring completed 4 feet from monitoring well E101S to assess the selenium concentration in the groundwater in this location. The groundwater sample was collected in accordance with the Quality Assurance Project Plan prepared by BVSPC for the site, dated November 7, 2003. Table 6-1 presents a summary of the analytical data from the 2003 sampling event as well

as the historical concentrations of selenium in monitoring well E101S. Based on a review of the available data, it appears that the selenium levels in the groundwater at monitoring well E101S have reduced to below the MCL of 50 ug/L.

6.5 Site Inspection

A site inspection was conducted on December 19, 2003, by the BVSPC Site Manager. The site inspection was also attended by Daniel Gravatt with KDHE. The purpose of the site inspection was to assess the protectiveness of the remedy. As part of the site inspection, a groundwater sample was collected from the immediate vicinity of monitoring well E101S as recommended by the first five-year review. The groundwater sample was collected from a direct-push boring because monitoring well E101S was again found to be obstructed prohibiting collection of a sample from E101S. Based on the boring log and monitoring well completion log for E101S (provided in Appendix A), E101S was screened from approximately 5 to 15 feet below ground surface (bgs). The water level in E101S measured in 1987 was 5.6 feet bgs. Therefore, to intersect the middle of the screened interval in E101S and most closely simulate the RI sampling effort, the direct-push sampler was placed from approximately 8 to 12 feet bgs as specified in the QAPP. The results of the split sampling effort are discussed in Section 6.4.

6.6 Interviews

Interviews were conducted with various parties connected to the site. Mr. Daniel Gravatt with KDHE indicated that the state of Kansas would be in favor of discontinuing the five-year reviews. In addition, Mr. Victor Eisenring, the property owner, was interviewed. Mr. Eisenring indicated that he had performed all activities required of him and that regulatory activities at the site should cease.

Table 6-1
Groundwater Sampling Results for Monitoring Well E101S

Analyte	2003 Results (December 2003)	RI Results (1987)	Cleanup Standard
Selenium	ND (35 ug/L)	62 ug/L	50 ug/L
<p>Notes:</p> <p>The 2003 results were obtained from a groundwater sample collected from a direct-push sampling location installed 4 feet northwest of monitoring well E101S.</p> <p>ND - Analyte not detected above the detection limit provided in parentheses.</p> <p>The cleanup standard for selenium is the MCL.</p>			

7.0 Technical Assessment

7.1 Question A: Is the remedy functioning as intended by the decision documents?

Review of documents, applicable or relevant and appropriate regulations (ARARs), risk assumptions, and results of the site inspection indicates that the remedies for the site are functioning as intended by the ROD. Analytical results from the groundwater sampling indicate that the selenium levels have reduced to below the MCL.

7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of remedy selection still valid?

There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedies. The ARAR for selenium, an MCL of 50 ug/L, has been met in the groundwater.

7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No new ecological targets have been identified at the site. No events have occurred since the last five-year review that would effect the protectiveness of the remedies. There is no other information that calls into question the protectiveness of the remedies.

7.4 Technical Assessment Summary

According to the data reviewed, the site inspection, and the interviews, the remedies are functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedies. The groundwater levels of selenium have reduced to below the MCL.

8.0 Issues

There were no major issues identified during the five-year review that effect the protectiveness of the remedies.

9.0 Recommendations and Follow-Up Actions

It is recommended that this be the last five-year review conducted at the site. Selenium concentrations in the groundwater in the vicinity of monitoring well E101S during this five-year review were below the MCL. The remedial action objectives of the ROD have been met.

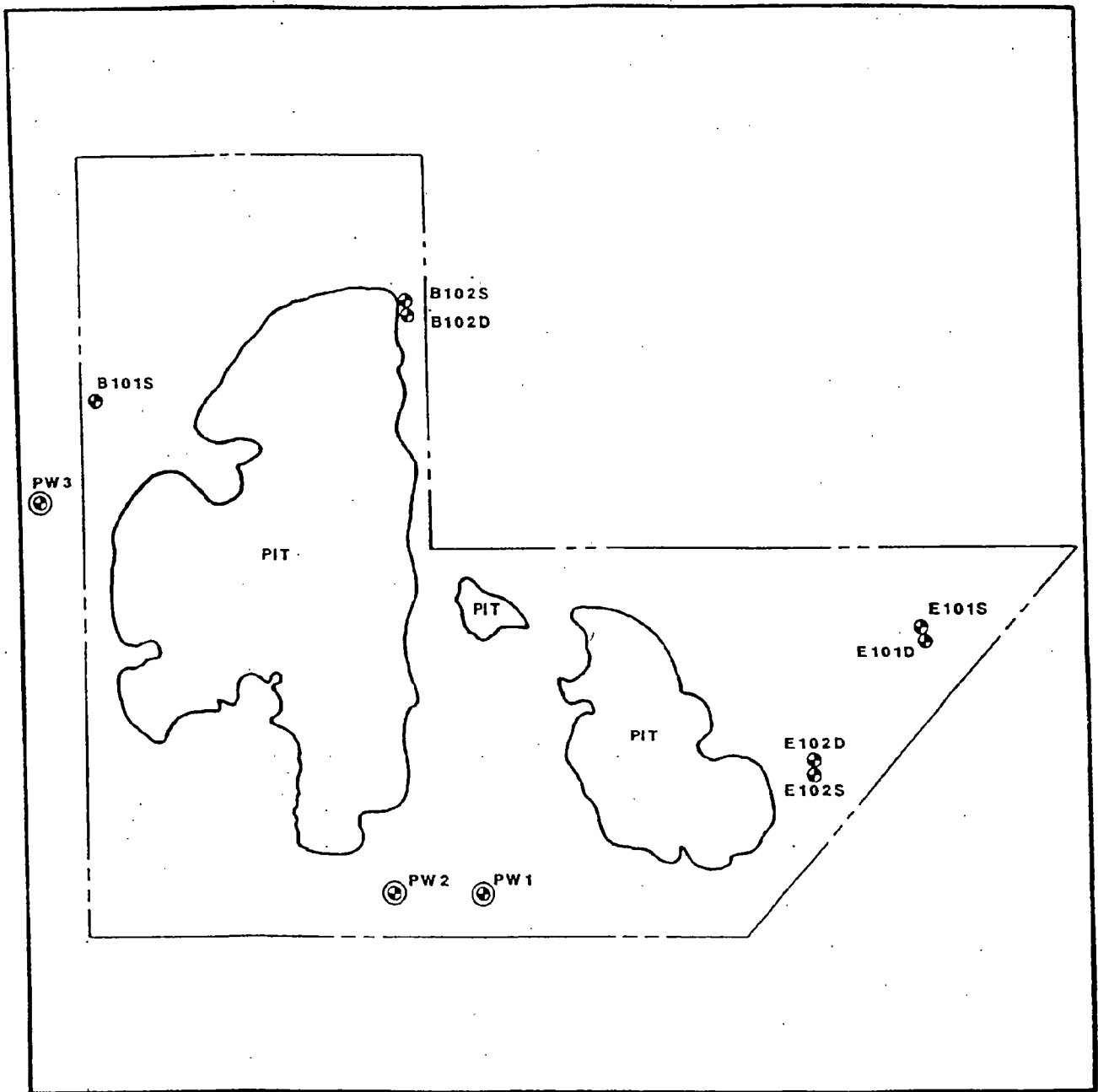
10.0 Protectiveness Statement

Because the remedial actions are protective, the site is protective of human health and the environment. The groundwater concentrations have reduced to below the MCL for selenium.

11.0 Next Review

No additional five-year reviews are recommended for the site. All the remedial actions are complete. The concentrations of selenium in the groundwater have reduced to below the MCL at monitoring well E101S.

Attachment 1
Site Figures and Well Logs



EXPLANATION

- E101S
⊕ GROUNDWATER SAMPLING LOCATION
AND NUMBER (WELL INSTALLED BY MATHES)
- PW1
⊙ PRIVATE WELL



Figure A-1
Site Map
Big River Sand Company Site

JOHN MATHES & ASSOCIATES, INC.

PAGE 1 OF 2

GEOLOGIC LOG FOR BORING NO. E1015

SERIAL # GL 00007

DATE 4-30-87 / 0930

PROJECT NO. 12872749

PROJECT Big River Sand

MAJOR TASK 2187 SUBTASK 2057

LOCATION Wichita, Kansas

GROUND SURFACE ELEVATION 1315.0'

DEPTH (ft)	SAMPLE				SAMPLE DESCRIPTIONS	DEPTH OF CHANGE	N/G			REMARKS
	NUMBER	INTERVAL (ft)	TYPE	RECOVERY (in)						
5					No samples taken. For stratigraphy see E101D Geologic log. T.O.B @ 16.25'					#1
										#2
10										
15										#2
										#2
										#3
20										
25										
30										
35										

DRILLING METHOD 4 1/4" Hollow-Stemmed Augers (ID) GROUNDWATER

DATE DRILLED 4/30/87

Encountered at 6.0 feet

DRILLED BY J. Breeding

LOGGED BY T. Fuhrhop

PIEZOMETER Yes

WI SERIAL # 00004

DATE/TIME OF COMPLETION

BORING 4-30-87 1015

WELL INSTALLATION 1100

WELL PROTECTION 1100

BORING NO. DE101S JMA PROJECT NO. 12872749 DATE 4-30-87

[illegible][illegible]

JOHN MATHES & ASSOCIATES, INC.

PAGE 1 OF 3

GEOLOGIC LOG FOR BORING NO. E1010

SERIAL # GL 00005

DATE 4-29-87 / 0830

PROJECT NO. 12872749

PROJECT Big River Sand.

MAJOR TASK 2187 SUBTASK 2057

LOCATION Wichita, Kansas

GROUND SURFACE ELEVATION 1315.2'

DEPTH (ft)	SAMPLE				SAMPLE DESCRIPTIONS	DEPTH OF CHANGE	N/6"			REMARKS
	NUMBER	INTERVAL (ft)	TYPE	RECOVERY (in)						
	1	0' 4'	AS		Silty clay - brown - some sand; trace organics; lenses of dark brown sand clay - CL					
-5	2	4' 6'	SS	17"	SAA - some Fe stains seen; Changes to fine sand-brown - some silt, some med - coarse sand - sub-rounded; Fe stains present - SP	5.7'	2	2	5	#1
-10	3	9.0 11.0'	SS	20"	Fine Brown sand - SAA Brown sandy clay - sand fine - Med heavily stained (Red-brown Fe stains) - CL	10.4'	1	2	1	
-15	4	14.0' 16.0'	SS	10"	Med - coarse sand - light brown sub-rounded; trace gravel; mostly quartz - SP		3	4	4	#2 #3
-20	5	19.0' 20.5'	SS	17"	Med - coarse sand - brown; trace fines; no gravel; sub rounded - SP		8	11	18	#4 #2 #3
-25	6	24.0' 25.5'	SS	12"	S.A.A.		8	10	8	#2 #3
-30	7	29.0' 30.5'	SS	18"	Fine - med sand - brown; no fines or gravel; rounded; mostly quartz SP		7	10	14	#2 #3
-35	8	34.0' 35.5'	SS	16"	Med - coarse sand - brown; sub rounded; trace gravel and fines reached yellow zone 35'-35'3" No HNU readings SP		5	7	11	#2 #3

DRILLING METHOD 4 1/2" Hollow-Stemmed Augers (I.D.)
 DATE DRILLED 4-29-87 / 0830
 DRILLED BY J. Breeding
 LOGGED BY T. Fuhrhop
 PIEZOMETER Yes
 WI SERIAL # 00003

GROUNDWATER
 Encountered at 6.0 feet

DATE/TIME OF COMPLETION

BORING 4-29-87 1145
 WELL INSTALLATION 1630
 WELL PROTECTION 1630

JOHN MATHES & ASSOCIATES, INC.

PAGE 2 OF 3

GEOLOGIC LOG FOR BORING NO. E101D

SERIAL # GL 00005

DATE 4-29-87 / 0830

PROJECT NO. 12872749

PROJECT Big River Sand

MAJOR TASK 2187 SUBTASK 2057

LOCATION Wichita, Kansas

GROUND SURFACE ELEVATION 1315.2'

DEPTH (ft)	SAMPLE				SAMPLE DESCRIPTIONS	DEPTH OF CHANGE	N/G			REMARKS
	NUMBER	INTERVAL (ft)	TYPE	RECOVERY (in)						
40	9	39.0' 40.5'	SS	18"	Med - coarse sand - brown; subrounded; trace gravel and fines. Seem 4" thick fine brown sand; no fines or coarse sand (39'8" - 40'0")- SP		5	7	11	#2 #3
45	10	44.0' 45.5'	SS	18"	Sandy clay - gray; some thin layers of gray clay (<1" thick). Some yellow leached areas-CL	45'	3	6	14	#5 #6
	11	46.5' 47.5'	SS	12"	Sandy gravelly clay - brown - wet CL. Changes to Silty clay - brown - stiff; some fissures (filled with gray silty material); some gravel; 47.0' - None below that, no visible water in sample when broken. Clay confining layer. CL	46.8'		6	7	#7 #8
-50					T.O.B @ 47.5					
-55										
-60										
-70										
-80										

DRILLING METHOD 4 1/2" Hollow-Stemmed Augers (I.D.)
 DATE DRILLED 4-29-87 / 0830
 DRILLED BY J. Breeding
 LOGGED BY T. Fuhrhop
 PIEZOMETER Yes
 WI SERIAL # 00003

GROUNDWATER

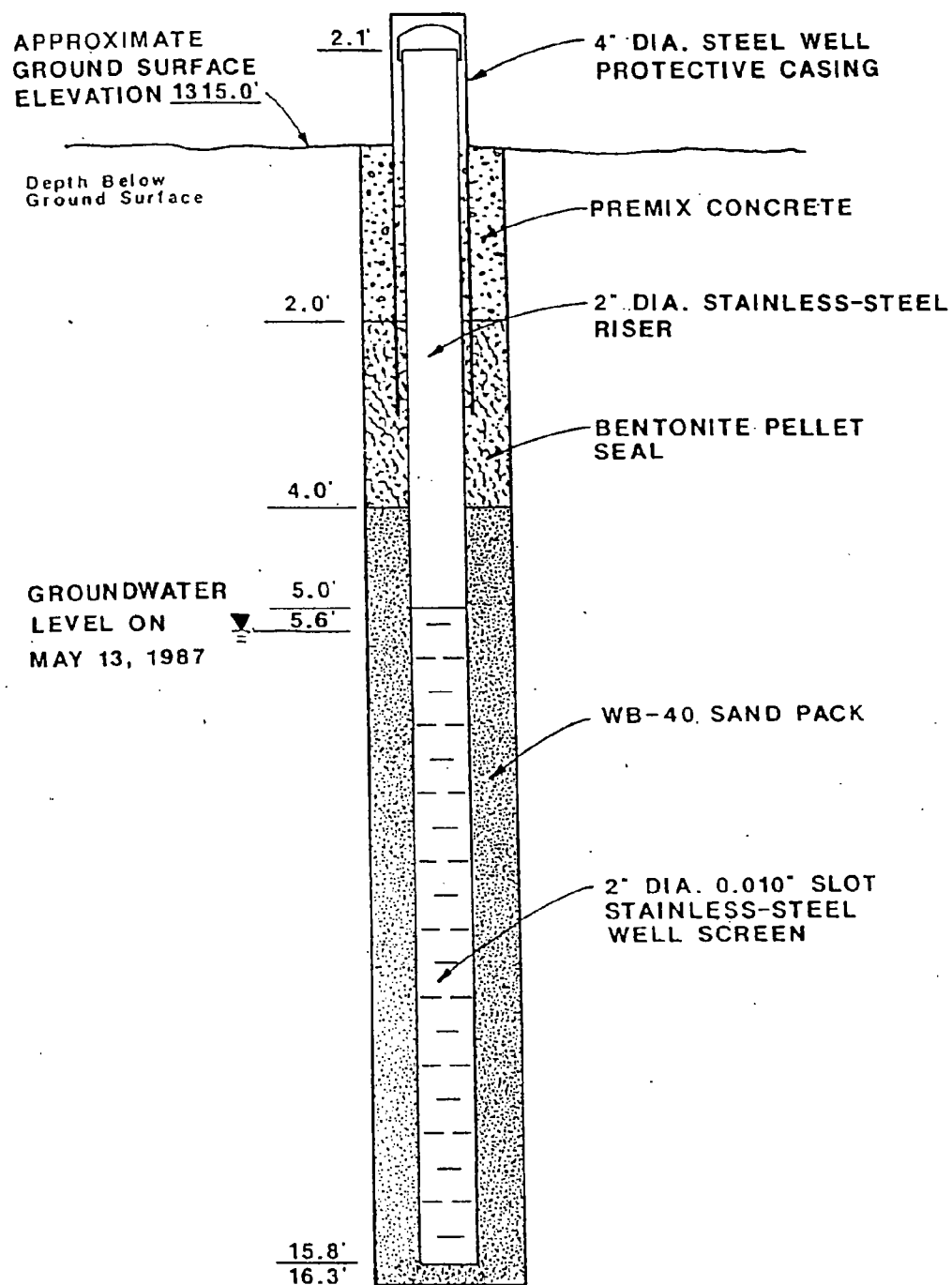
Encountered at 6.0 feet

DATE/TIME OF COMPLETION

BORING 4-29-87 1145
 WELL INSTALLATION 1630
 WELL PROTECTION 1630

[illegible][illegible]

PROJECT NO. 12872749 DRILLER J. BREEDING/J. BARKER
 MONITORING WELL NO. E101S DATE INSTALLED 4/30/87



NOT TO SCALE

BOREHOLE DIAMETER 8" SANDPACK 12.3' WB-40
 SCREEN LENGTH 10.8' RISER LENGTH 7.1'

Attachment 2
Site Documents Reviewed

Site Documents Reviewed
Big River Sand Company Site
Second Five-Year Review

Department of the Army, Kansas City District Corps of Engineers, Big River Sand Company Superfund Site Remedial Investigation Report, prepared by John Mathis & Associates, April 1988.

KDHE, Site Inspection Follow-Up Report, Big River Sand Company/Eisenring Site, Wichita, Kansas, October 9, 1985.

KDHE, Groundwater Analytical Results, Big River Sand Company Site, Wichita, Sedgwick County, Kansas, February 1996.

USEPA, Record of Decision, Big River Sand Company, EPA ID KSD980686174, Wichita, Kansas, June 28, 1988.

USEPA, Big River Sand Superfund Site, Five-Year Review Report for the Big River Sand Company Site, Sedgwick County, Kansas, February 1, 1999.

Attachment 3
Applicable or Relevant and Appropriate Requirements

ARARs Review

The Record of Decision (ROD) for the Big River Sand Company site identified the federal maximum contaminant level (MCL) for selenium as an applicable or relevant and appropriate requirements (ARAR). At the time the ROD was signed (June 28, 1988), the MCL for selenium was 10 ug/L. In 1991, the MCL for selenium was raised to 50 ug/L. This raised MCL was identified in the first five-year review in 1999.

A review of the current standards show that the MCL for selenium has not changed since the first five-year review was conducted in 1999. Therefore, the MCL for selenium of 50 ug/L remains in ARAR for the site.

Attachment 4
2003 Groundwater Sampling Data

United States Environmental Protection Agency
Region 7
901 N. 5th Street
Kansas City, KS 66101

Date: 01/15/2004

Subject: Transmittal of Sample Analysis Results for ASR #: 2251

Project ID: WG075N

Project Description: Big River Sand Company site

From: Dale I. Bates, Director
Regional Laboratory, Environmental Services Division

To: Bill Gresham
SUPR/IANE

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition memo for this ASR.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

OPTIONAL FORM 10 (7-99)

FAX TRANSMITTAL

of pages ► 8

To	Genise Luecke	From	Bill Gresham
Dept./Agency	BVSPC	Phone #	551-7804
Fax #	458-6633	Fax #	551-7063

NEN 7540-01-311-7309

5000-101

GENERAL SERVICES ADMINISTRATION

Project Manager: Bill Gresham**Org:** SUPR/IANE**Phone:** 913-551-7804**Project ID:** WG075N**Project Desc:** Big River Sand Company site**Location:** Wichita**State:** Kansas**Program:** Superfund**Site Name:** BIG RIVER SAND CO. - REMEDIAL ACTIVITIES**Site ID:** 075N **Site OU:** 01**Purpose:** Site Characterization**Explanation of Codes, Units and Qualifiers used on this report****Sample QC Codes:** QC Codes identify the type of sample for quality control purpose.**Units:** Specific units in which results are reported.

___ = Field Sample

ug/L = Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.

U = The analyte was not detected at or above the reporting limit.

ASR Number: 2251

Sample Information Summary

01/15/2004

Project ID: WG075N

Project Desc: Big River Sand Company site

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 -		Water	Geoprobe E101S Replacement	GP101S	12/19/2003	12:19			12/22/2003

ASR Number:2251

RLAB Approved Analysis Comments

01/15/2004

Project ID: WG075N

Project Desc: Big River Sand Company site

Analysis Comments About Results For This Analysis

I Metals in Water by ICP

Lab: Contract Lab Program (Out-Source) **Method:** CLP Statement of Work **Samples:** 1-__ **Comments:**

ASR Number: 2251**Project ID: WG075N****RLAB Approved Sample Analysis Results****Project Desc: Big River Sand Company site****01/15/2004****Analysis/ Analyte****Units****1-__**1 Metals in Water by ICP
Selenium

ug/L

35.0 U

ACTIVITY LEADER(Print) Bill Gresham	NAME OF SURVEY OR ACTIVITY Big River Sand	DATE OF COLLECTION 19 12 03 DAY MONTH YEAR	SHEET 1 of 1
--	--	--	-----------------

CONTENTS OF SHIPMENT					DAY	MONTH	YEAR			
SAMPLE NUMBER	TYPE OF CONTAINERS				SAMPLED MEDIA				RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)	
	<input checked="" type="checkbox"/> CUBITAINER	<input type="checkbox"/> BOTTLE	<input type="checkbox"/> BOTTLE	<input type="checkbox"/> BOTTLE	VGA SET (2 VIALS EA)	WATER	SOIL	Sediment		Other
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER									
2251-C1	2	—	—	—	—	X	—	—	ms/msd	
<div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="transform: rotate(-45deg); font-size: 2em; font-weight: bold; margin: 0 10px;">X</div> <div style="transform: rotate(45deg); font-size: 2em; font-weight: bold; margin: 0 10px;">X</div> </div>										
Chr. Temp. Rec'd bet. 3-5°										

DESCRIPTION OF SHIPMENT	MODE OF SHIPMENT
_____ PIECE(S) CONSISTING OF _____ BOX(ES) <u>1</u> ICE CHEST(S): OTHER _____	_____ COMMERCIAL CARRIER: _____ _____ COURIER <input checked="" type="checkbox"/> SAMPLER CONVEYED
	(SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD				
RELINQUISHED BY (SAMPLER) <i>Sam Luecke</i>	DATE <i>12/24/03</i>	TIME <i>455</i>	RECEIVED BY <i>Ray W. Green</i>	REASON FOR CHANGE OF CUSTODY <i>Recd @ EPA</i>
<input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED	
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED	
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED	

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 2251 Sample Number: 1 QC Code: __ Matrix: Water Tag ID: 2251-1-__

Project ID: WG075N
Project Desc: Big River Sand Company site
City: Wichita
Program: Superfund
Site Name: BIG RIVER SAND CO. - REMEDIAL ACTIVITIES

Project Manager: Bill Gresham

State: Kansas

Site ID: 075N Site OU: 01

Location Desc: Geoprobe E1015 Replacement

External Sample Number: GP1015

Expected Conc: (or Circle One: Low Medium High) Date Time(24 hr)

Latitude: _____

Sample Collection: Start: 12/19/03 12:19

Longitude: _____

End: 1/1/ 1:

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180 Days	1 Metals in Water by ICP

Sample Comments:

(N/A)

Collected an MS/MSD also.

Geoprobe located ~4 feet NW of E1015.

Sample collected from 12 feet bgs

Sample Collected By: LM Lucke

Sample Collection Field Sheet

US EPA Region 7

Kansas City, KS

ASR Number: 2251 Sample Number: 2 QC Code: PE Matrix: Water Tag ID: 2251-2-PE

Project ID: WG075N
Project Desc: Big River Sand Company site
City: Wichita
Program: Superfund
Site Name: BIG RIVER SAND CO. - REMEDIAL ACTIVITIES

Project Manager: Bill Gresham

State: Kansas

Site ID: 075N Site OU: 01

Location Desc: CLP QATS PE SAMPLE: METALS

External Sample Number: _____

Expected Conc: Low (or Circle One: Low Medium High)

Date

Time(24 hr)

Latitude: _____

Sample Collection: Start: 12/22/2003 10:00

Longitude: _____

End: ____/____/____ :__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
1 - 1.5 L 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180 Days	1 Metals in Water by ICP

Sample Comments:

QATS SAMPLE ID # IS2565

SAMPLES AND INSTRUCTION SHEETS IN BACK DOCK REFRIGERATOR TO BE INCLUDED WITH THE FIELD SAMPLES. 12-03-03 RKE

Sample Collected By: GL

Attachment 5
Site Inspection Trip Memorandum with
Checklist and Interview Forms

BLACK & VEATCH SPECIAL PROJECTS CORP.

TRIP MEMORANDUM

USEPA
Big River Sand Company Site
Second Five-Year Review Report
Site Inspection

BVSPC Project 46916.845
BVSPC File E.1
December 31, 2003

To: File

From: G.M. Luecke

Dates onsite: December 19, 2003
Personnel onsite: Genise Luecke, BVSPC

Trip Purpose: Conduct the site inspection and collect groundwater sample from monitoring well E101S or in the immediate vicinity of E101S in accordance with the quality assurance project plan (QAPP) prepared by BVSPC dated November 7, 2003.

The following is a summary of the activities completed during the site inspection. The site inspection activities were recorded on pages 1 through 3 of the Field Logbook. Two pictures were taken during the site inspection and copies are attached.

Friday, December 19, 2003

Met with Mr. Vic Eisenring, property owner, at 1030. Dan Gravatt with the Kansas Department of Health and Environment (KDHE) and BVSPC's direct-push subcontractor, BSG, also arrived onsite.

Mr. Eisenring provided site access and aided in locating the monitoring well nest E101. Both wells were locked and appeared to be in good condition. No keys were available for the locks, so the locks were cut. Replacement locks were provided. Water levels and total depth of the wells were measured to determine which of the two wells in the well nest was the shallow well (E101S). The northwesterly well was obstructed at about 10 feet below top of casing and no water was present. The other well in the well nest was approximately 49 feet deep and the water level was about 9.5 feet below top of casing. Based on the overall depth of the well compared to the well completion logs, it was determined that the northwesterly well was E101S.

Because E101S was obstructed, a direct-push boring was installed approximately 4 feet northwest of E101S. The boring was installed to a total depth of 12 feet below ground surface (bgs). There was approximately 4 feet of water in the boring. The groundwater sampler was placed from 8 to 12 feet bgs and the boring was purged using a peristaltic pump. Readings for temperature, pH, and oxidation reduction potential (ORP) were recorded during purging. A turbidity meter was not available. Readings were recorded approximately every 5 minutes. It is estimated that 1.5 to 2 gallons of water were purged from the boring. After the readings stabilized (in accordance with the QAPP) and the water cleared, one groundwater sample (along with extra volume for a matrix spike/matrix spike duplicate) was collected for analysis of metals.

Following collection of the groundwater sample, the boring was backfilled with bentonite. The direct-push equipment was decontaminated and everyone demobilized from the site at 1300. Purge water and decontamination water was disposed of to the ground in the vicinity of the boring.

Copies of the Field Logbook pages, photographs, field sheet, and chain of custody are attached.

1

DM Luedke

12/19/03 1030 arrived at site
 Sunny 40°F
 Talked with Mr. Vic Esserling
 He took us back to the
 wells. E1015 and G101D.
 Mr. Esserling talked with
 Dan Gharrett about other
 properties in the area
 with problems.
 BGS - Mike
 KDHE - Dan Gharrett
 also on site

~~2011~~

1115 cut lock on E1015.
 No water to 10 feet and
 well is blocked at
 10 feet.
 cut lock on E101D - water,
 at ~ 9.5 feet Well is 4'9"
 deep.

1130 Began installing boring
 38 feet NW of E1015
 installed to 12 feet then

2

DM Luedke

12/19/03

1130 checked for water
 4.5 feet of water in the
 wellhole
 1145 Began pumping
 1157 YSI calibrated by BGS
 Reading Temp 16.39 °C
 ORP 141.4
 pH 6.82
 Hose is about 6" from
 bottom. i.e. 11.5' bgs

1204 Temp 15.93
 ORP 124.4
 pH 6.69

1209 Temp 16.07
 ORP 114.3
 pH 6.69

1214 Temp 16.18
 ORP 104.3
 pH 6.69

1219 Temp 16.29
 ORP 91.7
 pH 6.71

collected sample for
 metals analysis and
 MS/MND

DM Luedke

31

12/19/03

GM Truck

1230 365 disassembled and broke
down equipment. Pulled
rods and backfilled
bounty

1800 Stopped to tell Mr.
Garrison that we were
done inside and leaving.

~~GM Truck~~

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 2251 Sample Number: 1 QC Code: Matrix: Water Tag ID: 2251-1-

Project ID: WG075N
Project Desc: Big River Sand Company site
City: Wichita
Program: Superfund
Site Name: BIG RIVER SAND CO. - REMEDIAL ACTIVITIES

Project Manager: Bill Gresham

State: Kansas

Site ID: 075N Site OU: 01

Location Desc: Geoprobe E1015 Replacement

External Sample Number: GP1015

Expected Conc: (or Circle One: Low Medium High) Date Time(24 hr)

Latitude: _____

Sample Collection: Start: 12/19/03 12:19

Longitude: _____

End: 1/1/ 1:

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
- 1 Liter Cubitainer	HNO3 acidify, 4 Deg C	180 Days	1 Metals in Water by ICP

Sample Comments:

N/A)

Collected an MS/MSD also.

Seeprobe located ~4 feet NW of E1015.

Sample collected from 12 feet bgs

Sample Collected By:

LM Luecke

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print) Bill Gresham		NAME OF SURVEY OR ACTIVITY Big River Sand		DATE OF COLLECTION 19 DAY 12 MONTH 03 YEAR			SHEET 1 of 1		
CONTENTS OF SHIPMENT									
SAMPLE NUMBER	TYPE OF CONTAINERS				SAMPLED MEDIA				RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt other sample numbers, etc.)
	<input checked="" type="checkbox"/> CUBITAINER	<input type="checkbox"/> BOTTLE	<input type="checkbox"/> BOTTLE	<input type="checkbox"/> BOTTLE	VOA SET (2 VIALS EA)	water	soil	sediment	
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER					dust	other		
2251-C1	2					X			MS/MSD
<div>2251-C1</div>									
____ PIECE(S) CONSISTING OF ____ BOX(ES)					____ COMMERCIAL CARRIER: _____				
____ ICE CHEST(S); OTHER _____					____ COURIER				
					<input checked="" type="checkbox"/> SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER)				
PERSONNEL CUSTODY RECORD									
RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY					
Sam Gresham	12/23/03	455	Sam W. Gresham	Rec'd @ EPA					
<input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED						
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY					
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED						
RELINQUISHED BY	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY					
<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED			<input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED						

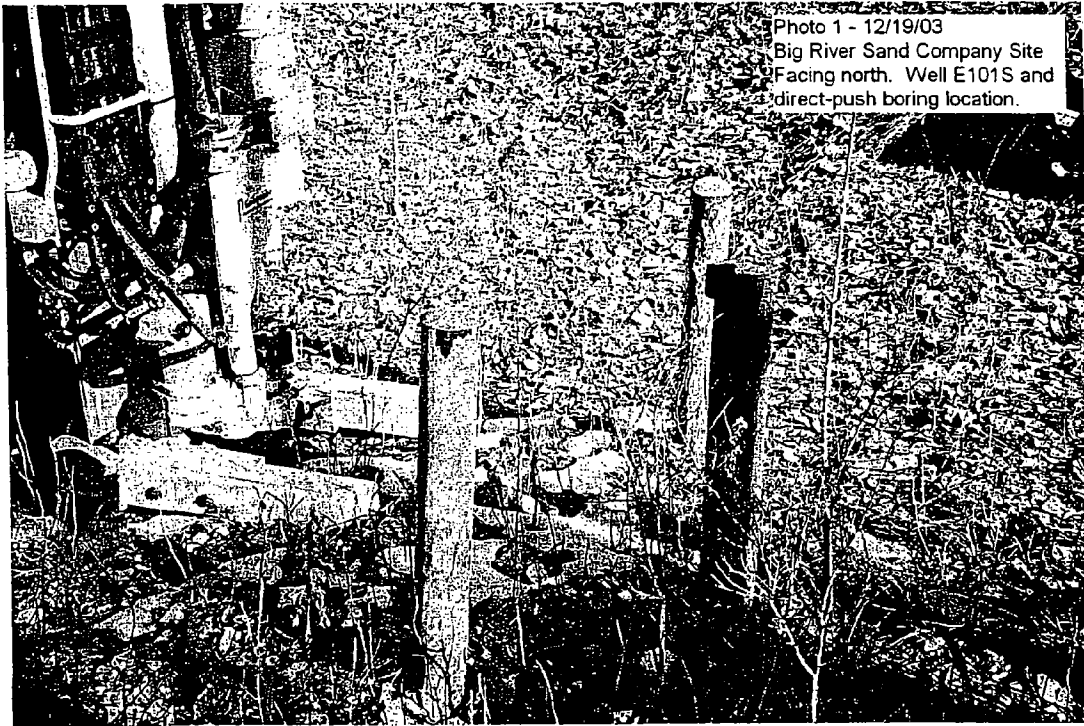


Photo 1 - 12/19/03
Big River Sand Company Site
Facing north. Well E101S and
direct-push boring location.



Photo 2 - 12/19/03
Big River Sand Company Site
Facing northwest. Installing
direct-push boring ~ 4 feet
northwest of well E101S.

Site Inspection Checklist

I. SITE INFORMATION																	
Site name: Big River Sand Company Site	Date of inspection: December 19, 2003																
Location and Region: Wichita, KS/ Region 7	EPA ID: KSD980686174																
Agency, office, or company leading the five-year review: USEPA Region 7	Weather/temperature:																
Remedy Includes: (Check all that apply) <table border="0"> <tr> <td><input type="checkbox"/> Landfill cover/containment</td> <td><input type="checkbox"/> Monitored natural attenuation</td> </tr> <tr> <td><input type="checkbox"/> Access controls</td> <td><input type="checkbox"/> Groundwater containment</td> </tr> <tr> <td><input type="checkbox"/> Institutional controls</td> <td><input type="checkbox"/> Vertical barrier walls</td> </tr> <tr> <td><input type="checkbox"/> Groundwater pump and treatment</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Surface water collection and treatment</td> <td></td> </tr> <tr> <td colspan="2"><input checked="" type="checkbox"/> Other <u>groundwater monitoring at the time of the five-year review</u></td> </tr> <tr> <td colspan="2">_____</td> </tr> <tr> <td colspan="2">_____</td> </tr> </table>		<input type="checkbox"/> Landfill cover/containment	<input type="checkbox"/> Monitored natural attenuation	<input type="checkbox"/> Access controls	<input type="checkbox"/> Groundwater containment	<input type="checkbox"/> Institutional controls	<input type="checkbox"/> Vertical barrier walls	<input type="checkbox"/> Groundwater pump and treatment		<input type="checkbox"/> Surface water collection and treatment		<input checked="" type="checkbox"/> Other <u>groundwater monitoring at the time of the five-year review</u>		_____		_____	
<input type="checkbox"/> Landfill cover/containment	<input type="checkbox"/> Monitored natural attenuation																
<input type="checkbox"/> Access controls	<input type="checkbox"/> Groundwater containment																
<input type="checkbox"/> Institutional controls	<input type="checkbox"/> Vertical barrier walls																
<input type="checkbox"/> Groundwater pump and treatment																	
<input type="checkbox"/> Surface water collection and treatment																	
<input checked="" type="checkbox"/> Other <u>groundwater monitoring at the time of the five-year review</u>																	

Attachments: <input type="checkbox"/> Inspection team roster below <input checked="" type="checkbox"/> Site map attached Site Inspection performed by: Genise M. Luecke with Black & Veatch Special Projects Corp.																	

II. INTERVIEWS (Check all that apply)

Dan Gravatt, Kansas Department of Health and Environment. Interview form attached.
Victor Eisenring, property owner. Interview form attached.

Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____
Problems, suggestions; ☐ Report attached _____

2. O&M staff

Name	Title	Date
Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____		
Problems, suggestions; <input type="checkbox"/> Report attached _____		

3.	Local regulatory authorities and response agencies (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.			
Agency	<u>KDHE</u>			
Contact	<u>Dan Gravatt</u>	<u>Env. Geologist/PM</u>	<u>Various</u>	<u>785/296-6378</u>
	Name	Title	Date	Phone no.
Problems; suggestions; <input checked="" type="checkbox"/> Report attached				
<hr/>				
Agency	<u></u>			
Contact	<u></u>	<u></u>	<u></u>	<u></u>
	Name	Title	Date	Phone no.
Problems; suggestions; <input type="checkbox"/> Report attached				
<hr/>				
Agency	<u></u>			
Contact	<u></u>	<u></u>	<u></u>	<u></u>
	Name	Title	Date	Phone no.
Problems; suggestions; <input type="checkbox"/> Report attached				
<hr/>				
Agency	<u></u>			
Contact	<u></u>	<u></u>	<u></u>	<u></u>
	Name	Title	Date	Phone no.
Problems; suggestions; <input type="checkbox"/> Report attached				
<hr/>				
4.	Other interviews (optional) <input checked="" type="checkbox"/> Report attached.			
Victor Eisenring, Property Owner				
<hr/>				
<hr/>				
<hr/>				
<hr/>				
<hr/>				
<hr/>				
<hr/>				
<hr/>				
<hr/>				

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)				
1.	O&M Documents N/A <input type="checkbox"/> O&M manual <input type="checkbox"/> As-built drawings <input type="checkbox"/> Maintenance logs Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
2.	Site-Specific Health and Safety Plan N/A <input type="checkbox"/> Contingency plan/emergency response plan Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
3.	O&M and OSHA Training Records N/A Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
4.	Permits and Service Agreements N/A <input type="checkbox"/> Air discharge permit <input type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits _____ Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
5.	Gas Generation Records N/A Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
6.	Settlement Monument Records N/A Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
7.	Groundwater Monitoring Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
8.	Leachate Extraction Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
9.	Discharge Compliance Records <input type="checkbox"/> Air <input type="checkbox"/> Water (effluent) Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
10.	Daily Access/Security Logs Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A

IV. O&M COSTS																																											
1.	O&M Organization - NA <input type="checkbox"/> State in-house <input type="checkbox"/> Contractor for State <input type="checkbox"/> PRP in-house <input type="checkbox"/> Contractor for PRP <input type="checkbox"/> Federal Facility in-house <input type="checkbox"/> Contractor for Federal Facility <input type="checkbox"/> Other _____																																										
2.	O&M Cost Records - N/A <input type="checkbox"/> Readily available <input type="checkbox"/> Up to date <input type="checkbox"/> Funding mechanism/agreement in place Original O&M cost estimate _____ <input type="checkbox"/> Breakdown attached <div style="text-align: center;">Total annual cost by year for review period if available</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">From _____</td> <td style="width: 10%;">To _____</td> <td style="width: 30%;"></td> <td style="width: 40%; text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> <tr> <td>From _____</td> <td>To _____</td> <td></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Total cost</td> <td></td> </tr> </table>			From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost		From _____	To _____		<input type="checkbox"/> Breakdown attached	Date	Date	Total cost	
From _____	To _____		<input type="checkbox"/> Breakdown attached																																								
Date	Date	Total cost																																									
From _____	To _____		<input type="checkbox"/> Breakdown attached																																								
Date	Date	Total cost																																									
From _____	To _____		<input type="checkbox"/> Breakdown attached																																								
Date	Date	Total cost																																									
From _____	To _____		<input type="checkbox"/> Breakdown attached																																								
Date	Date	Total cost																																									
From _____	To _____		<input type="checkbox"/> Breakdown attached																																								
Date	Date	Total cost																																									
3.	Unanticipated or Unusually High O&M Costs During Review Period Describe costs and reasons: _____ _____ _____ _____ _____																																										
V. ACCESS AND INSTITUTIONAL CONTROLS <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A																																											
A. Fencing																																											
1.	Fencing damaged <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Gates secured <input type="checkbox"/> N/A Remarks _____ _____																																										
B. Other Access Restrictions																																											
1.	Signs and other security measures <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> N/A Remarks _____ _____																																										

C. Institutional Controls (ICs)**1. Implementation and enforcement**

Site conditions imply ICs not properly implemented

☐ Yes ☐ No ☒ N/A

Site conditions imply ICs not being fully enforced

☐ Yes ☐ No ☒ N/A

Type of monitoring (e.g., self-reporting, drive by) _____

Frequency _____

Responsible party/agency _____

Contact _____

Name

Title

Date

Phone no.

Reporting is up-to-date

☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency

☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met

☐ Yes ☐ No ☒ N/A

Violations have been reported

☐ Yes ☐ No ☒ N/AOther problems or suggestions: ☐ Report attached**2.****Adequacy**☐ ICs are adequate☐ ICs are inadequate☒ N/A

Remarks _____

D. General**1.****Vandalism/trespassing**☐ Location shown on site map

No vandalism evident

Remarks _____

2.**Land use changes on site**☐ N/ARemarks None noted**3.****Land use changes off site**☐ N/ARemarks None noted**VI. GENERAL SITE CONDITIONS****A. Roads**☐ Applicable☒ N/A**1.****Roads damaged**☐ Location shown on site map☐ Roads adequate☐ N/A

Remarks _____

B. Other Site Conditions			
Remarks _____			

VII. LANDFILL COVERS <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
A. Landfill Surface			
1.	Settlement (Low spots) Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map Depth _____	<input type="checkbox"/> Settlement not evident
2.	Cracks Lengths _____ Widths _____ Depths _____ Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Cracking not evident
3.	Erosion Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map Depth _____	<input type="checkbox"/> Erosion not evident
4.	Holes Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map Depth _____	<input type="checkbox"/> Holes not evident
5.	Vegetative Cover <input type="checkbox"/> Grass <input type="checkbox"/> Cover properly established <input type="checkbox"/> No signs of stress <input type="checkbox"/> Trees/Shrubs (indicate size and locations on a diagram) Remarks _____		
6.	Alternative Cover (armored rock, concrete, etc.) <input type="checkbox"/> N/A Remarks _____		
7.	Bulges Areal extent _____ Remarks _____	<input type="checkbox"/> Location shown on site map Height _____	<input type="checkbox"/> Bulges not evident

8.	Wet Areas/Water Damage <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps <input type="checkbox"/> Soft subgrade Remarks _____	<input type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map Areal extent _____ <input type="checkbox"/> Location shown on site map Areal extent _____ <input type="checkbox"/> Location shown on site map Areal extent _____ <input type="checkbox"/> Location shown on site map Areal extent _____
9.	Slope Instability <input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of slope instability Areal extent _____ Remarks _____	
B. Benches <input type="checkbox"/> Applicable <input type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)		
1.	Flows Bypass Bench Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay
2.	Bench Breached Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay
3.	Bench Overtopped Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay
C. Letdown Channels <input type="checkbox"/> Applicable <input type="checkbox"/> N/A (Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)		
1.	Settlement <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of settlement Areal extent _____ Depth _____ Remarks _____	
2.	Material Degradation <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of degradation Material type _____ Areal extent _____ Remarks _____	
3.	Erosion <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of erosion Areal extent _____ Depth _____ Remarks _____	

4.	Undercutting Areal extent _____ Depth _____ Remarks _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> No evidence of undercutting	
5.	Obstructions Type _____ <input type="checkbox"/> Location shown on site map Areal extent _____ Size _____ Remarks _____	<input type="checkbox"/> No obstructions	
6.	Excessive Vegetative Growth Type _____ <input type="checkbox"/> No evidence of excessive growth <input type="checkbox"/> Vegetation in channels does not obstruct flow <input type="checkbox"/> Location shown on site map Areal extent _____ Remarks _____		
D. Cover Penetrations <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Gas Vents <input type="checkbox"/> Active <input type="checkbox"/> Passive <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
2.	Gas Monitoring Probes <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
3.	Monitoring Wells (within surface area of landfill) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
4.	Leachate Extraction Wells <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____		
5.	Settlement Monuments <input type="checkbox"/> Located <input type="checkbox"/> Routinely surveyed <input type="checkbox"/> N/A Remarks _____		

E. Gas Collection and Treatment		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	Gas Treatment Facilities <input type="checkbox"/> Flaring <input type="checkbox"/> Thermal destruction <input type="checkbox"/> Collection for reuse <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____		
2.	Gas Collection Wells, Manifolds and Piping <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____		
3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings) <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____		
F. Cover Drainage Layer		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	Outlet Pipes Inspected <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____		
2.	Outlet Rock Inspected <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____		
G. Detention/Sedimentation Ponds		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	Siltation Areal extent _____ Depth _____ <input type="checkbox"/> N/A <input type="checkbox"/> Siltation not evident Remarks _____ _____		
2.	Erosion Areal extent _____ Depth _____ <input type="checkbox"/> Erosion not evident Remarks _____ _____		
3.	Outlet Works <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____		
4.	Dam <input type="checkbox"/> Functioning <input type="checkbox"/> N/A Remarks _____ _____		

H. Retaining Walls		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	Deformations Horizontal displacement _____ Rotational displacement _____ Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident
2.	Degradation Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident
1. Perimeter Ditches/Off-Site Discharge			
		<input type="checkbox"/> Applicable	<input type="checkbox"/> N/A
1.	Siltation Areal extent _____ Depth _____ Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Siltation not evident
2.	Vegetative Growth <input type="checkbox"/> Vegetation does not impede flow Areal extent _____ Type _____ Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A
3.	Erosion Areal extent _____ Depth _____ Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident
4.	Discharge Structure Remarks _____	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
VIII. VERTICAL BARRIER WALLS			
		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1.	Settlement Areal extent _____ Depth _____ Remarks _____	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Settlement not evident
2.	Performance Monitoring <input type="checkbox"/> Performance not monitored Frequency _____ Head differential _____ Remarks _____	Type of monitoring _____ <input type="checkbox"/> Evidence of breaching	

IX. GROUNDWATER/SURFACE WATER REMEDIES <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A	
A. Groundwater Extraction Wells, Pumps, and Pipelines <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A	
1.	Pumps, Wellhead Plumbing, and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells properly operating <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ _____ _____
2.	Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____ _____
3.	Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____ _____
B. Surface Water Collection Structures, Pumps, and Pipelines <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A	
1.	Collection Structures, Pumps, and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____ _____
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ _____ _____
3.	Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks _____ _____ _____

C. Treatment System		<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1.	Treatment Train (Check components that apply) <input type="checkbox"/> Metals removal <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Bioremediation <input type="checkbox"/> Air stripping <input type="checkbox"/> Carbon adsorbers <input type="checkbox"/> Filters _____ <input type="checkbox"/> Additive (e.g., chelation agent, flocculent) _____ <input type="checkbox"/> Others _____ <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> Sampling ports properly marked and functional <input type="checkbox"/> Sampling/maintenance log displayed and up to date <input type="checkbox"/> Equipment properly identified <input type="checkbox"/> Quantity of groundwater treated annually _____ <input type="checkbox"/> Quantity of surface water treated annually _____ Remarks _____ 	
2.	Electrical Enclosures and Panels (properly rated and functional) <input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ 	
3.	Tanks, Vaults, Storage Vessels <input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Proper secondary containment <input type="checkbox"/> Needs Maintenance Remarks _____ 	
4.	Discharge Structure and Appurtenances <input type="checkbox"/> N/A <input type="checkbox"/> Good condition <input type="checkbox"/> Needs Maintenance Remarks _____ 	
5.	Treatment Building(s) <input type="checkbox"/> N/A <input type="checkbox"/> Good condition (esp. roof and doorways) <input type="checkbox"/> Needs repair <input type="checkbox"/> Chemicals and equipment properly stored Remarks _____ 	
6.	Monitoring Wells (pump and treatment remedy) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> All required wells located <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks _____ 	
D. Monitoring Data – Required at the time of the five-year review		
1.	Monitoring Data <input checked="" type="checkbox"/> Is routinely submitted on time <input checked="" type="checkbox"/> Is of acceptable quality	
2.	Monitoring data suggests: <input type="checkbox"/> Groundwater plume is effectively contained <input checked="" type="checkbox"/> Contaminant concentrations are declining	

D. Monitored Natural Attenuation			
1.	Monitoring Wells (natural attenuation remedy) <input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> Good condition <input checked="" type="checkbox"/> All required wells located <input type="checkbox"/> Needs Maintenance <input type="checkbox"/> N/A Remarks <u>E101S continues to be blocked. A direct-push groundwater sample was collected.</u> <hr/> <hr/>		
X. OTHER REMEDIES			
If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.			
XI. OVERALL OBSERVATIONS			
A. Implementation of the Remedy			
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>			
B. Adequacy of O&M			
Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>			

C.	Early Indicators of Potential Remedy Problems
	<p>Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.</p> <p><u>No potential problems were identified during the site visit/site inspection.</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
D.	Opportunities for Optimization
	<p>Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

INTERVIEW DOCUMENTATION FORM

The following is a list of individual interviewed for this five-year review. See the attached contact record(s) for a detailed summary of the interviews.

Daniel Gravatt	Environmental Geologist/Project Manager	KDHE	Various
Name	Title/Position	Organization	Date
Victor Eisenring	Property Owner	N/A	12/19/03
Name	Title/Position	Organization	Date
Name	Title/Position	Organization	Date
Name	Title/Position	Organization	Date
Name	Title/Position	Organization	Date
Name	Title/Position	Organization	Date

INTERVIEW RECORD

Site Name: Big River Sand Company Site		EPA ID No.: KSD980686174	
Subject: Second Five-Year Review		Time: 1030	Date: 12/19/03
Type: <input checked="" type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Location of Visit: Big River Sand Site, Wichita, KS			
Contact Made By:			
Name: Genise Luecke		Title: Site Manager	Organization: BVSPC
Individual Contacted:			
Name: Daniel Gravatt		Title: Envir. Geologist/PM	Organization: KDHE
Telephone No: 785/296-6398		Street Address: 1000 SW Jackson	
Fax No: 785/296-4823		City, State, Zip: Topeka, KS 66612	
E-Mail Address: dgravatt@kdhe.state.ks.us			
Summary Of Conversation			
Mr. Gravatt did not identify any concerns regarding the site.			

INTERVIEW RECORD

Site Name: Big River Sand Company Site		EPA ID No.: KSD980686174	
Subject: Second Five-Year Review		Time: Various	Date: Various
Type: <input checked="" type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other Location of Visit: Big River Sand Site, Wichita, KS		<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Contact Made By:			
Name: Genise Luecke		Title: Site Manager	Organization: BVSPC
Individual Contacted:			
Name: Victor Eisenring		Title: Property Owner	Organization: N/A
Telephone No: 316/943-4372 Fax No: E-Mail Address:		Street Address: 4620 W. 21 st St. N City, State, Zip: Wichita, KS 67205	
Summary Of Conversation			
<p>Mr. Eisenring provided us access to monitoring well E101S. Mr. Eisenring provided copy of a newspaper article from the Wichita Eagle detailing the delisting of the site.</p> <p>Mr. Eisenring stated that he had done everything that the regulatory agencies had requested and the site has been deleted from NPL. He didn't understand why additional work was being conducted. He felt there were many other sites in the area much worse than his and provided information to Dan Gravatt of KDHE.</p>			